August 2012



2011-2012 School Year Reports

Dear School Board Members and School Personnel:

This 2011-2012 MEA Summary Report contains the results of student achievement in science at grades 5 and 8, as well as disaggregations by student and school characteristics. This report, together with MEA individual student and item analysis reports, provides support for use in program evaluation and planning.

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State science accountability standards of Maine's *Learning Results*. The *Learning Results* contain goals for what all students should know and be able to do at certain times in their school careers and include the accountability standards that are assessed for each grade. The MEA science test is administered to students in grades 5 and 8 to meet state assessment requirements and the federal requirements of the *No Child Left Behind* Act.

MEA results reflect scores based on the common science test questions that are taken by the approximately 14,000 students in each grade level. Students' scores are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. More information about the MEA is available at www.maine.gov/education/mea/index.htm.

Thank you for your continuing commitment to improve the quality and effectiveness of the instructional opportunities in your schools. These assuredly will help all students achieve the high standards of the *Learning Results* as demonstrated on classroom, district, and state assessments.

Sincerely,

Stephen L. Bowen
Commissioner of Education



Grade 5 Science State Report

Test Date: May 2012

Contents of the Report

The report is divided into three main sections including a section describing the students tested and a separate section for the content area results.

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Grade Level Summary Report

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State:	N/	n	ınn
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Schools and SAUs administered the MEA Science tests to every enrolled student with the following exceptions: students who participated in the alternate assessment for the 2011-12 school year, students for whom a special consideration was granted through the state Department of

Education, and other students for reasons not approved. On this page, and throughout this report, results are only reported for groups of students that are larger than nine (9).

DA DTICIDATION CUMMA DV		Number		Percentage								
PARTICIPATION SUMMARY	School	SAU	State	School	SAU	State						
Students enrolled			13,714			100						
		Science			Science							
Students tested			13,401			98						
With an approved accommodation			2,402			18						
Current LEP Students			428		·	3						
With an approved accommodation			194			45						
IEP Students			2,187			16						
With an approved accommodation			1,754		•	80						
Students not tested in MEA			313			2						
State Approved			232			74						
Alternate Assessment			214		•	92						
Special Consideration			18			8						
Other			81			26						

PERFORMANCE SUMMARY

State																								
Enrolled	Not Tested Approved	Not Tested Other	Tested	Lev	vel 4	Lev	vel 3 Le		Level 2 Level 1		Mean Scaled	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled	
N	N	N	N	N	%	N	%	N	%	N	%	Score	N	%	%	%	%	Score	N	%	%	%	%	Score
13,714	232	81	13,401	1,600	12	6,776	51	3,866	29	1,159	9	547												

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient Note: Throughout this report, percentages may not total 100 since each percentage is rounded to the nearest whole number.



Science Results

State: Maine

Proficient with Distinction (Level 4)

The student's work demonstrates in-depth understanding of essential concepts in science, including the ability to make multiple connections among central ideas. The student's responses demonstrate the ability to synthesize information, analyze and solve difficult problems, and explain complex concepts using evidence and proper terminology to support and communicate logical conclusions. (Scaled Score 562-580)

Proficient (Level 3)

The student's work demonstrates a general understanding of essential concepts in science, including the ability to make connections among central ideas. The student's responses demonstrate the ability to analyze and solve routine problems and explain central concepts with sufficient clarity and accuracy to demonstrate general understanding. (Scaled Score 542-560)

Partially Proficient (Level 2)

The student's work demonstrates incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student's responses demonstrate some ability to analyze and solve problems but the quality of responses is inconsistent. Explanation of concepts may be incomplete or unclear. (Scaled Score 530-540)

Substantially Below Proficient (Level 1)

The student's work demonstrates limited understanding of essential concepts in science and infrequent or inaccurate connections among central ideas. The student's responses demonstrate minimal ability to solve problems. Explanations are illogical, incomplete, or missing. There are many inaccuracies. (Scaled Score 500-528)

	Enrolled	Not Tested Approved	Not Tested Other	Tested	Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1	Mean Scaled
	N	N	N	N	N	%	N	%	N	%	N	%	Score
School 2009-10 2010-11 2011-12 Cumulative Total													
2009-10 2010-11 2011-12 Cumulative Total													
State 2009-10 2010-11 2011-12 Cumulative Total	13,898 13,841 13,714 41,453	207 265 232 704	59 77 81 217	13,632 13,499 13,401 40,532	1,137 1,041 1,600 3,778	8 8 12	7,563 7,678 6,776 22,017	57 51	3,823 3,697 3,866 11,386	27 29	1,109 1,083 1,159 3,351	8	545 546 547 546

Cubtonia	Total												
Subtopic	Possible Points		10	20	30	40	50 :	60	70 :	80	90	100	
D. The Physical Setting	24								•				◆ State — Standard
E. The Living Environment	24												Error Bar §

The MEA assesses students' science knowledge based on questions that measure the science accountability content strands highlighted in Maine's 2007 Learning Results: Parameters for Essential Instruction, which can be found at: http://www.maine.gov/education/lres/pei/index.html.

[§]The standard error bar indicates how much the percent of points earned could vary if the students were examined multiple times with the same test.



Disaggregated Science Results

State: Maine

CATEGORIES Properties Pro	DEDARTING		State																							
All Students 13,744 222 81 13,461 1,600 12 6,776 51 3,866 29 1,199 9 547 Gendar 1,141 151 55 0,535 0	REPORTING CATEGORIES	Enrolled			Tested	Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1		Tested	l					Tested					Mean Scale
Cender		N	N	N	N	N	%	N	%	N :	%	N	%	Score	N	%	: %	: %	%	Score	N	%	%	%	%	Score
Male 7,141 151 55 6,935 844 12 3,256 51 1,947 28 585 8 647 Fenale 6,571 61 28 6,644 756 12 3,216 50 1,919 20 573 9 546	All Students	13,714	232	81	13,401	1,600	12	6,776	51	3,866	29	1,159	9	547									1			
Male 7,141 151 55 6,935 844 12 3,256 51 1,947 28 585 8 647 Fenale 6,571 61 28 6,644 756 12 3,216 50 1,919 20 573 9 546	Gender																						1		1 1 1	
Famele		7.141	151	55	6.935	844	12	3.559	51	1.947	28	585	8	547			:						1	:		
RaceEthnicity	Female		81	26		756			50				9				:						1	:		
Hispanic or Lalino Not Hispanic or Lalino American Indian or Allaskan Native 120 2 0 1 18 8 7 50 42 46 88 15 13 542 Assan Assa			1					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,							: :	1	! !				1	1	1 1	
Not Hispanic or Latino	Race/Ethnicity																						1			
American Indian or Alaska Native 120 2 0 118 8 7 50 42 45 38 15 13 542 Asian	Hispanic or Latino	249	10	4	235	21	9	106	45	73	31	35	15	543				:			İ		1	1		
Asian Black or African American 407 111 3 3 335 8 2 116 30 142 122 50 6 66 27 25 10 547 Black or African American 407 111 3 3 335 8 2 116 30 1449 1 3 21 547 White Hawaiian or Pacific Islander 16 2 0 144 7 16 50 50 24 14 3 21 547 White Hawaiian or Pacific Islander 12,507 204 70 12,233 1510 12 6,500 52 3,441 8 3 21 547 White Type or T	Not Hispanic or Latino									:		:									1		1	1		
Black or African American Marke Hawadian or Pacific Islander 16 2 0 14 2 14 7 50 2 14 3 21 556 White 12,907 2044 70 12,233 1,510 12 6,300 52 3,481 28 942 8 547 Who or more races 164 1 0 163 21 13 74 45 50 31 18 11 546 No Race/Ethnicity Reported 2 0 0 0 2 1 13 74 45 50 31 18 11 546 No Race/Ethnicity Reported 2 0 0 0 2 1 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	American Indian or Alaskan Native	120	2	0	118	8	7	50	42	45	38	15	13	542			:	:			İ	İ	1	:	:	
Nalive Hawaiian or Pacific Islander White UPAGE White UPAGE White UPAGE White UPAGE White UPAGE White UPAGE White UPAGE White UPAGE	Asian	249	2	4	243	30	12	122	50	66	27	25	10	547			:	:			İ			1		
While Two or more races 164 1 0 15,507 204 70 12,233 1,510 12 6,300 52 3,481 28 942 8 547 Two or more races 164 1 0 163 21 13 74 45 50 31 18 11 546 No Race/Ethnicity Reported 2 0 0 0 2 1 13 74 45 50 31 18 11 546 LEP Status Current LEP student 447 9 10 428 5 1 105 25 160 37 158 37 534 Former LEP student-monitoring year 1 44 2 1 41 2 5 5 27 66 11 27 1 2 547 Former LEP student-monitoring year 2 24 0 0 24 5 21 19 79 0 0 0 0 557 All Other Students 13,199 221 70 12,908 1,588 12 6,625 51 3,695 29 1,000 8 547 IEP Students with an IEP 3,447 223 37 2,187 58 3 580 27 994 45 555 2,872 26 604 5 548 SES Economically Disadvantaged Students 1,267 9 44 11,214 1,542 14 6,196 55 2,872 26 604 5 548 SES Economically Disadvantaged Students 7,299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Magrant Students 6 0 0 0 6 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 79 77 548 Sudents with a 504 Plan 380 1 3 3 376 26 7 191 51 133 35 26 7 545	Black or African American	407	11	3	393	8	2	116	30	149	38	120	31	536				:						:		
Two or more races 164 1 0 163 21 13 74 45 50 31 18 11 546	Native Hawaiian or Pacific Islander	16	2	0	14	2	14	7	50	2	14	3	21	547				:						:		
No RacelEthnicity Reported 2	White	12,507	204	70	12,233	1,510	12	6,300	52	3,481	28	942	8	547				:						:		
LEP Status Current LEP student	Two or more races	164	1	0	163	21	13	74	45	50	31	18	11	546			:	;						;	:	
Current LEP student	No Race/Ethnicity Reported	2	0	0	2												:						;	-	! !	
Former LEP student - monitoring year 1	LEP Status																									
Former LEP student - monitoring year 1	Current LEP student	447	9	10	428	5	1	105	25	160	37	158	37	534			:	:					;	;		
All Other Students 13,199 221 70 12,908 1,588 12 6,625 51 3,695 29 1,000 8 547 IEP Students with an IEP 2,447 223 37 2,187 58 3 580 27 994 45 555 25 537 All Other Students 11,267 9 44 11,214 1,542 14 6,196 55 2,872 26 604 5 548 SES Economically Disadvantaged Students 6,415 171 52 6,192 381 6 2,725 44 2,226 36 860 14 530 All Other Students 7,299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Migrant Students 6 0 0 6 6 All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	Former LEP student - monitoring year 1	44	2	1	41	2	5		66	11	27	1	2								İ			1		
IEP Students with an IEP 2,447 223 37 2,187 58 3 580 27 994 45 555 25 537 All Other Students 11,267 9 44 11,214 1,542 14 6,196 55 2,872 26 604 5 548 SES Economically Disadvantaged Students 6,415 77 7299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Migrant Students 6 0 0 6 All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	Former LEP student - monitoring year 2	24	0	0	24	5	21	19	79	0	0	0	0	557							İ		1	-		
Students with an IEP	All Other Students	13,199	221	70	12,908	1,588	12	6,625	51	3,695	29	1,000	8	547					! !				1		! !	
All Other Students	IEP																	:					1		· ·	
SES Economically Disadvantaged Students 6,415 (7,299) 171 (52) 6,192 (6,192) 381 (6) 2,725 (7,299) 44 (7,226) 36 (7,299) 860 (14) 543 (7,299) 4 (7,299) 550 (7,299) 61 (7,299) 61 (7,299) 1,219 (7,299) 1	Students with an IEP	2,447	223	37	2,187	58	3	580	27	994	45	555	25	537									1			
Economically Disadvantaged Students 6,415 171 52 6,192 381 6 2,725 44 2,226 36 860 14 543 All Other Students 7,299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Migrant Students 6 0 0 0 6 All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 3 376 26 7 191 51 133 35 26 7 545	All Other Students	11,267	9	44		1,542	14	6,196	55	2,872	26			548			: :						1 1	1	1 1	
Economically Disadvantaged Students 6,415 171 52 6,192 381 6 2,725 44 2,226 36 860 14 543 All Other Students 7,299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Migrant Students 6 0 0 0 6 All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	SES																		i i				1		!	
All Other Students 7,299 61 29 7,209 1,219 17 4,051 56 1,640 23 299 4 550 Migrant Migrant Students 6 0 0 0 6 All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545		6.415	171	52	6.192	381	6	2.725	44	2.226	36	860	14	543			:				i		1	:		
Migrant Students 6 0 0 0 6 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545																		1					1	1	1 1	
Migrant Students 6 0 0 6 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Titte I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	Migrant																	:					1		, ,	
All Other Students 13,708 232 81 13,395 1,600 12 6,775 51 3,862 29 1,158 9 547 Title I Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	· ·	6	0	0	6				:	:		:					:						1	1		
Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545			1			1,600	12	6,775	51	3,862	29	1,158	9	547			: :	! !	! !				1	1	! !	
Students Receiving Title I Services 2,346 24 16 2,306 78 3 873 38 986 43 369 16 540 All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	Title I								:															1	, ,	
All Other Students 11,368 208 65 11,095 1,522 14 5,903 53 2,880 26 790 7 548 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545		2.346	24	16	2,306	78	3	873	. 38	986	43	369	16	540			:				1		1	1	1	
Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545			1														: :	:	! !				1		! !	
Students with a 504 Plan 380 1 3 376 26 7 191 51 133 35 26 7 545	504 Plan								:								:		! !				1			
		380	1	3	376	26	7	191	51	133	35	26	7	545							l		1	1		
	All Other Students	13,334	231	78	13,025	1,574	12	6,585	51	3,733	29	1,133		547				1			i		1	1		



Questionnaire Results

State: Maine

					Sta	ite																
QUESTIONNAIRE ITEMS	Students in Each Category	Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1	Mean Scaled	Students in Each Category	1	Level 3	Level 2	Level 1	Mean Scaled	Students in Each Category	Level 4	Level 3	Level 2	Level 1	Mean Scale
	%	N	%	N	%	N	%	N	%	Score	%	%	: %	%	%	Score	N	%	%	%	%	Score
How often do you do science in class?																						
A. every day	31	535	13	1,984	50	1,119	28	343	9	547									1			
B. a few times a week	49	803	; 12	3,367	52	1,800	28	459	7	547									1			
C. once a week	8	99	; 10	470	47	314	31	117	12	545									r I			
D. a few times a month	12	122	8	762	48	536	34	168	11	544									1	1		
Which statement best describes how you learn science?																						
A. I read a textbook and answer questions and/or take notes and do assignments.	28	289	. 8	1,736	48	1,264	35	358	10	544	i		:							:		
B. I work in groups to design and conduct experiments.	23	229	. 8	1,359	46	1,040	35	357	12	544	i		:						1			
C. I do a combination of A and B, mostly A.	27	572	17	1,865	54	823	24	202	6	549			:						1	:		
D. I do a combination of A and B, mostly B.	22	466	16	1,608	56	632	22	167	1	549			:						1	1		
How often do you make observations and collect data in science class?	l																		ì	;	i	
A. a few times a week	51	734	; 11	3,398	51	1,964	30	504	8	547									i	1	i	
B. a few times a month	28	582	16	1,913	52	930	25	233	6	549									1			
C. once a month	8	116	; 11	488	46	326	31	126	12	545									i	:		
D. never or almost never	13	127	8	775	46	548	33	217	13	544									1			
How do you feel about the following statement:																			1			
"Science is interesting and fun."			:										:						:	:		
A. strongly agree	31	582	. 14	2,090	52	1,044	26	307	8	548	i								1	:		
B. agree	54	838	12	3,609	52	2,017	29	508	7	547	i								1	:		
C. disagree	11	106	. 8	649	47	490	35	147	11	544	İ		:							:		
D. strongly disagree	5	33	5	239	39	222	36	121	20	540			! !						1	1		
Which of the following best describes how you rate yourself as a student in																			1		· ·	
science?			:										:							:	:	
A. very good	22	482	17	1,460	51	685	24	235	8	549			:						1			
B. good	56	935	13	3,890	53	2,001	27	492	7	548			:						1	:		
C. fair	19	137	. 5	1,150	46	947	38	288	11	543			:						1			
D. poor	2	6	2	92	29	143	36 45	74	23	537							i		1		1	
	-																				! !	
How well do the questions that you have just been given on this MEA test match what you have learned in school about science?			:										:							:		
A. The questions on the test match what I have learned in science class.	20	359	14	1,358	52	701	27	183	7	548									1			
B. They match some of what I have learned.	57	928	13	3,833	52	2,093	28	521	7	547	l								i .			
C. They match just a little of what I have learned.	19	241	10	1 '	49	776	31	254	10	545	l								1			
D. There is no match.	4	31	6	1,200 199	36	201	36	128	23	540												
													! !						1	1		
Do you think you would like to have a job that is related to SCIENCE when you grow up?			:																			
A. No, this type of job is too hard.	5	19	3	210	32	299	45	136	20	539							İ		1			
B. No. I'm not interested.	41	441	. 8	2,631	50	1,749	33	493	9	545			:						E e			
C. I might be interested if I knew more about this type of job.	26	435	13	1,798	53	931	27	224	7	548			:						1			
D. Yes, I have some interest.	16	379	18	1,104	54	456	22	113	6	550									1			
E. Yes, I'm very interested.	12	283	18	839	53	337	21	118	7	550									1			
E. 100, 1111 very interested.	12	200	. 10	039	JJ	331	41	110	, ,	000	1								r			